REMARKS

Applicants Supplemental Amendment / Reply for RCE

In the RCE dated September 9, 2003, Applicant requested a suspension of action for three months, i.e. until December 9, 2003, and on December 9, 2003 sent a Supplemental Amendment / Reply for RCE by facsimile.

Applicant attaches herewith a copy of the Supplemental Amendment / Reply for RCE, and will assume that this Supplemental paper of December 9, 2003 has been entered in the Patent Office file for purposes of the present response.

Section 3 at Page 3 of the Official Action of 12/23/2003

In the Supplemental Amendment / Reply for RCE referred to in the previous section of this response, applicant at page 2 of the Supplement Amendment / Reply for RCE made amendment to claim 19, changing "generated" to – generated - so the Section 3 at Page 3 of the Official Action mailed 12/23/2003, thus has been taken care of.

Sections 4 and 5 of the Office Action of 12/23/2003

Applicant respectfully refers to the following statement in the Official Action at Page 4:

"Many coded targets being scanned for processing is taught in column 33, lines 1-12. It is obvious to a skill in the art that more than one coded target can be scanned and each undecoded output signal is a signal of a coded target".

As Applicant explained in detail in its Amendment / Reply for RCE dated September 9, 2003, the teaching of col. 33, lines 1-12, to one of ordinary skill in the art, is that "a day's

worth of decoded data is stored and transferred to a PC later" (the quoted passage being from Section 2 at Page 2 of the Official Action of 12/23/2003). Such a teaching re decoded data has no bearing for one of ordinary skill in the art to Applicant's claim19 which requires, in the context of entire claim 19 read as a whole:

"a non-dedicated second processing circuit, for coupling to the image buffer, that, after said plurality of undecoded images each representing information concerning a coded target as a whole, are stored in the image buffer, after a request by the capture system, and with the non-dedicated second processing circuit having received the plurality of undecoded images from the image buffer so as to have the plurality of undecoded images available at a time for processing, attempts decode processing of said plurality of undecoded images." (Emphasis Supplied)

As stated at page 14 of the present specification, the bottom three lines, and page 15, line 1 reading:

"Moreover, with multiple coded images available at a time, the host unit 12 is able to perform decode processing faster, more accurately and without the time constraints imposed on conventional decode processors of having to complete a decode attempt on one image before the next is captured."

A host system that receives "a day's worth of <u>decoded</u> data" is <u>not</u> required to do decode processing. There is no teaching in the Postman Patent 6,041,374 of any advantage to having multiple coded (undecoded) images available at a time such as the ability to perform decoding faster and more accurately. Note also the following explanation from page 8 of the present application, showing further advantages of Applicant's teachings:

"In some configurations, images are only captured when a target is proximate to the optical unit. Images are transmitted to the host unit only when the image processor determines that the image probably constitutes a coded image. The capture cycle may be shortened if code image criteria is satisfied by the coded images already captured during the capture cycle. Similarly, the capture cycle may be extended if no code is detected in the coded images captured during the capture cycle.

A reference code image may be buffered and only code image differences are buffered thereafter to reduce storage and transmission demands."

With respect to claim 20, per the last subparagraph of claim 20, the coded processing circuitry in the context of the entire claim 20:

"selectively directing the processing circuit to decode the plurality of undecoded images each representative of <u>said</u> coded target." (Emphasis Supplied)

The passage of the Postman Patent 6,041,374 at col. 33, lines 1-12, not only teaches to one of ordinary skill in the art the non-relevant transfer of "a days worth of decoded data" (as seemingly recognized at Section 2 at Page 2 of the Official Action of 12/23/2003), but also lacks any suggestion, taken with reference to the total relationships of claim 20, of selectively directing the processing circuit to decode a plurality of undecoded images each representative of "said", i.e. the same, coded target. Applicant would refer again to the following text at page 8 of the specification:

"In some configurations, images are only captured when a target is proximate to the optical unit. Images are transmitted to the host unit only when the image processor determines that the image probably constitutes a coded image. The capture cycle may be shortened if code image criteria is satisfied by the coded images already captured during the capture cycle. Similarly, the capture cycle may be extended if no code is detected in the coded images captured during the capture cycle.

A reference code image may be buffered and only code image differences are buffered thereafter to reduce storage and transmission demands".

Section 6 and 7 at Pages 6 – 10 of the Official Action of 12/23/2003

Tamura et al appears to store a first group of data re record 30, then a second group of data re record 31, and then a third group of data re record 32, in memory 17. Then the first group of data (record 30) is read out from memory 17, and decoded by decoder 18. Next, the second group of data (record 31 is read out from memory 17, and decoded by decoder 18. Finally, the third group of data (record 32) is read out from memory 17 and decoded by decoder 18.

With respect to the totality of relationships of claim 19, Applicant fails to find any teaching in Tamura et al or in Postman of:

"a non-dedicated second processing circuit, for coupling to the image buffer, that, after said plurality of undecoded images each representing information concerning a coded target as a whole, are stored in the image buffer, after a request by the capture system, and with non-dedicated second processing circuit having received the plurality of undecoded images from the image buffer so as to have the plurality of undecoded images available at a time for processing, attempts decode processing of said plurality of undecoded images." (Emphasis Supplied)

In both Tamura and Postman, the decoder has only one undecoded image to process at a time.

With respect to the totality of relationships of claim 20, Tamura et al and Postman lack:

"coded processing circuitry, communicatively coupled to the processing circuit, selectively directing the processing circuit to decode the plurality of undecoded images each representative of <u>said</u> coded target". (Emphasis Supplied)

In Tamura et al, each undecoded image refers to a different target (30, 31, or 32). In Postman as previously explained, the processor decodes one image at a time. See, for example, FIGS. 6A-6B, e.g. items 160 and 612, and col. 51, lines 64-65.

Claim 21 is similar to claim 19, and distinguishes over the grounds of rejection for the same reasons as claim 19; claim 21 is intended to cover an embodiment such as described for example at page 36, the middle paragraph, beginning at the third line of the middle paragraph.

Dependent claim 22 refers to an embodiment such as described at the bottom of page 13, the fourth, third and second lines from the bottom of page 13, and to an interval timer such as described at page 38, lines 1 - 4, and in FIG. 4 at block 403, thus further distinguishing over the grounds of rejection. See also page 27, the second complete paragraph, reading:

"Similarly, with the present design, the capture unit 202 need not be restricted by the dedication of the host unit 204. If capturing images occurs rapidly in comparison to image delivery and decode processing times (for example with remote shared host units and/or two-dimensional image decoding), the capture unit 202 is able to enter a sleep or low power mode during the interval timer 212 time out instead of making possibly futile attempts to deliver a continuous stream of images to an unreachable or unavailable host unit for decode processing."

Dependent claim 23 is based on the disclosure at page 26, lines 3-7, for example, and thus further distinguishes over the grounds of rejection.

With respect to dependent claim 24, processing of two-dimensional code is illustrated in FIG. 1B, and is described for example at page 16, lines 4-17, and is not shown by the references.

Dependent claim 25 refers to an example such as described at page 36, the last four lines, and at page 37, lines 1-9, for example, and thus further distinguishes over the grounds of rejection.

Independent claims 26 and 27 relate to processing of two-dimensional code e.g. as illustrated in FIG. 1B, and as described for example at page 16, lines 4-17, and distinguish over the grounds of rejection as explained with reference to Claim 20 also.

Dependent claims 28 and 29 are supported, for example, at page 16, lines 6-10, not shown by the references.

Dependent claims 30 and 31 are based on the example given at page 21, line 7, for example, not taught by the references, in the respective claimed combinations.

With respect to new claims 21-31, applicant has explained in detail in the Amendment/Reply for RCE of September 9, 2003 that Postman et al 6,041,374 would not be understood by one of ordinary skill in the art as teaching that a nonvolatile memory on a PC card could contain a whole day's worth of scan data in <u>undecoded form</u>. (If the scan data is undecoded, the operator of the scanner would not know if decodable information on scanned bar codes had been obtained for an entire day.) For undecoded data, the teaching of Postman is that each undecoded image as it is generated, is sent to the decoding circuitry, which upon a successful decode, as per 160, FIG. 6A of Postman, sends an appropriate signal, whereupon per 162, the laser scanning mechanism is powered down.

With respect to col. 51, lines 39 – 41, of Postman, there is no teaching to one of ordinary skill that plural undecoded images are stored. See, for example, col. 51, lines 58 – 62, which confirms that once there is sample data from a complete barcode in data buffer 778, FIG. 37, the barcode decode software routine 798 is invoked.

GENERAL AUTHORIZATION UNDER 37 CFR 1.136(a)(3)

The Patent and Trademark Office is hereby authorized to treat this or any future reply, requiring a petition for an extension of time, as incorporating a petition for extension of time for the appropriate length of time.

The Patent and Trademark Office is hereby authorized to charge fees under 37 CFR 1.16 and 1.17 to deposit account 14-1190.

Payment of Extra Claim Fees

The Patent and Trademark Office is hereby authorized to charge fees under 37 CFR 1.16 and 1.17 to Deposit Account 14-1190 in accordance with the enclosed Fee Transmittal form.

CONCLUSION

An earnest effort has been made to fully respond to the Official Action of December 23, 2003, and a favorable consideration and allowance of the claims as now presented is respectfully solicited.

Respectfully submitted,

John H. Sherman, Reg. No. 16,909

c/o Legal Department

Intermec Technologies Corporation

550 Second Street SE Cedar Rapids, IA 52401 Telephone: 319-369-3661

Enclosures:

(1) Copy of Supplemental Amendment/ Reply for RCE Filed December 9,

2003, Pages 1-11, and Fax Receipt Confirmation Pages

(2) Fee Transmittal Form for Payment of the Extra Claim Fee